

What is claimed:

1-37. (Canceled)

38. (Previously presented) An apparatus for transmitting data using a plurality of antennas in a mobile communication system, the apparatus comprising:

a feedback signal reception unit receiving channel status information for each of the plurality of antennas from a receiving side;

a data block segmentation unit segmenting a first data block into at least two second data blocks;

a Cyclic Redundancy Check (CRC) attachment unit attaching a CRC to each of the at least two second data blocks; and

a data block allocation unit allocating each of the at least two second data blocks and dummy bits to the plurality of antennas based on the received channel status information, wherein each of the at least two second data blocks is allocated to an antenna having good channel status and only the dummy bits are allocated to an antenna having bad channel status,

wherein each of the plurality of antennas transmits the allocated second data block or dummy bits.

39. (Previously presented) The apparatus of claim 38, wherein the dummy bits are predefined between the apparatus and the receiving side.

40. (Previously presented) The apparatus of claim 38, wherein the CRC is differently attached to each of the at least two second data blocks.

41. (Previously presented) The apparatus of claim 38, wherein the channel status information is a positive acknowledgement (ACK) or a negative acknowledgement (NACK) for each of the at least two second data blocks or the dummy bits which has been transmitted via each of the plurality of antennas.

42. (Previously presented) A method of transmitting data at a transmitting side using a plurality of antennas in a mobile communication system, the method comprising:

receiving channel status information for each of the plurality of antennas from a receiving side;

segmenting a first data block into at least two second data blocks;

attaching a Cyclic Redundancy Check (CRC) to each of the at least two second data blocks; and

allocating each of the at least two second data blocks and dummy bits to the plurality of antennas based on the received channel status information, wherein each of the at least two second data blocks is allocated to an antenna having good channel status and only the dummy bits are allocated to an antenna having bad channel status,

wherein each of the plurality of antennas transmits the allocated second data block or dummy bits.

43. (Previously presented) The method of claim 41, wherein the dummy bits are predefined between the transmitting side and the receiving side.

44. (Previously presented) The method of claim 41, wherein the CRC is differently attached to each of the at least two second data blocks.

45. (Previously presented) The method of claim 41, wherein the channel status information is a positive acknowledgement (ACK) or a negative acknowledgement (NACK) for each of the at least two second data blocks or the dummy bits which has been transmitted via each of the plurality of antennas.